

Cruise Narrative

Sale Name:	Tower	Region:	Pacific Cascade
App. #:	30-076209	District:	St. Helens
Lead cruiser:	Derwood Duncan III	Completion date:	July 15 th , 2004
Other cruisers on sale: Marvin Kirner and Chuck Backman			

Unit acreage specifications:

Unit #	Cruised acres	Cruised acres agree with sale acres? Yes/No	If acres do not agree explain why.
1	68	Yes	N/A
Total	68	N/A	N/A

Unit cruise specifications:

Unit #	Sample type (VP, FP, ITS,100%)	Expansion factor (BAF, full/half)	Sighting height (4.5 ft, 16 ft.)	Grid size (Plot spacing or % of area)	Plot ratio (cruise: count)	Total number of plots
1	VP	54.45, Full	4.5	440 X 100	Cr1, Co2	22cr, 41CO Total 63

Unit/Cruise Description:

Minor species cruise intensity:	Cruised all Minor Species trees within cruise plots.					
Minimum cruise spec:	Cruised all trees to 40% of form-factor, or six-inch top.					
Avg ring count by sp:	DF =	8	WH =	8	SS =	0
Leave/take tree description:	Leave trees were within "Leave Tree Area" tags, or individually painted with blue paint.					
Other conditions						

Field observations:

The fir is fairly uniform throughout the sale with very few hardwoods. A majority of the special mill timber is located in the Northwest corner of the sale.

To the West of the P-line there are several large rock outcroppings.

The Western edge and Southwest part of the sale has a large amount of think vine maple with a few small blow down pockets throughout.

There is some timber in and along the bald area between points 69 and 95. To the South of the P-line there are no tags between the sale edge and the bald area.

There is a small landing to the West of point 45. You can access this from the PH 2000. The walk out is fairly flat after you get a few hundred feet across the creek. This is the easiest way out of the bottom of the unit.

The points are one off on the Eastern edge of the sale. Point 119 on the traverse map is point 120.

Grants: 10 _____

Prepared by: Derwood D. Duncan III

Title: Forest Cruiser

TC		PSPCSTGR		Species, Sort Grade - Board Foot Volumes (Project)																		
<div>T06N R02E S19 TyU168.00</div>				Project:		TOWER										Page		1				
				Acres		68.00										Date		7/15/2004				
																Time		3:33:53PM				
S Spp	So T	Gr rt	ad BdFt	% Net	Bd. Ft. per Acre			Total Net MBF	Percent of Net Board Foot Volume								Average Log			Logs Per /Acre		
									Log Scale Dia.				Log Length				Ln Ft	Bd Ft	CF/ Lf			
					4-5	6-11	12-16		17+	12-20	21-30	31-35	36-99									
DF	DM	SM	11		.5	6,403	6,373	433	100				100				32	569	3.08	11.2		
DF	DM	2S	67		3.0	37,629	36,494	2,482	3 39 58				100				32	338	1.98	107.9		
DF	DM	3S	21		3.1	11,502	11,141	758	1	81	16	2	5	7	87	26	71	0.69	157.2			
DF	DM	4S	1			528	528	36	100					74	26		15	14	0.26	37.0		
DF Totals			99		2.7	56,062	54,537	3,708	1	18	29	51	2	2	96	27	174	1.29	313.4			
									100				100				32	85	0.59	6.5		
WH	DM	3S	97			550	550	37	100				100				32	85	0.59	6.5		
WH	DM	4S	3			16	16	1	100					100					6	5	0.17	3.2
WH Totals			1			566	566	38	3	97					3	97	23	58	0.56	9.7		
																	27	40	0.61	4.2		
BM	DM	4S	100		27.3	232	169	11	13	87					13	87	27	40	0.61	4.2		
BM Totals			0		27.3	232	169	11	13	87					13	87	27	40	0.61	4.2		
																	27	169	1.26	327.3		
Totals					2.8	56,860	55,271	3,758	1	19	29	50	2	2	96	27	169	1.26	327.3			

TC PSTATS				PROJECT STATISTICS				PAGE 1				
				PROJECT	TOWER	DATE 7/15/2004						
TWP	RGE	SC	TRACT	TYPE	ACRES	PLOTS	TREES	CuFt	BdFt			
06N	02E	19	TOWER	U1	68.00	63	304	S	W			
			PLOTS	TREES	TREES PER PLOT	ESTIMATED TOTAL TREES	PERCENT SAMPLE TREES					
TOTAL			63	304	4.8							
CRUISE			22	113	5.1	7,230	1.6					
DBH COUNT												
REFOREST												
COUNT			41	191	4.7							
BLANKS												
100 %												
STAND SUMMARY												
			SAMPLE TREES	TREES /ACRE	AVG DBH	BOLE LEN	REL DEN	BASAL AREA	GROSS BF/AC	NET BF/AC	GROSS CF/AC	NET CF/AC
DOUG FIR			110	101.0	21.6	88	58	256.7	56,062	54,537	10,880	10,875
WHEMLOCK			2	3.2	14.0	78	1	3.5	566	566	125	125
BL MAPLE			1	2.1	15.0	57		2.6	232	169	70	70
TOTAL			113	106.3	21.3	87		262.7	56,860	55,271	11,075	11,070
										# OF TREES REQ.		INF. POP.
SD: 1			COEFF VAR.	S.E.%	LOW	AVG	HIGH		7	8	9	
DOUG FIR			77.2	7.3	785	846	908					
WHEMLOCK			748.6	70.4	1	3	5					
BL MAPLE			1063.0	100.0	0	1	1					
TOTAL			76.3	7.2	789	850	911		119	91	72	
										# OF TREES REQ.		INF. POP.
SD: 1			COEFF VAR.	S.E.%	LOW	AVG	HIGH		7	8	9	
DOUG FIR			70.2	6.6	152	163	173					
WHEMLOCK			748.5	70.4	0	1	1					
BL MAPLE			1063.0	100.0		0	1					
TOTAL			69.0	6.5	153	164	174		97	74	59	
										# OF PLOTS REQ.		INF. POP.
SD: 1			COEFF VAR.	S.E.%	LOW	AVG	HIGH		7	8	9	
DOUG FIR			43.3	5.5	95	101	106					
WHEMLOCK			479.5	60.4	1	3	5					
BL MAPLE			587.8	74.1	1	2	4					
TOTAL			48.7	6.1	100	106	113		48	37	29	
										# OF PLOTS REQ.		INF. POP.
SD: 1			COEFF VAR.	S.E.%	LOW	AVG	HIGH		7	8	9	
DOUG FIR			33.3	4.2	246	257	267					
WHEMLOCK			479.5	60.4	1	3	6					
BL MAPLE			587.8	74.1	1	3	5					
TOTAL			35.6	4.5	251	263	275		26	20	16	
										# OF PLOTS REQ.		INF. POP.
SD: 1			COEFF VAR.	S.E.%	LOW	AVG	HIGH		7	8	9	
DOUG FIR			33.8	4.3	52,214	54,537	56,859					
WHEMLOCK			479.5	60.4	224	566	908					
BL MAPLE			587.8	74.1	44	169	294					
TOTAL			35.0	4.4	52,837	55,271	57,705		25	19	15	
										# OF PLOTS REQ.		INF. POP.
SD: 1			COEFF VAR.	S.E.%	LOW	AVG	HIGH		7	8	9	
DOUG FIR			33.5	4.2	10,416	10,875	11,334					
WHEMLOCK			479.5	60.4	49	125	200					
BL MAPLE			587.8	74.1	18	70	121					
TOTAL			35.1	4.4	10,580	11,070	11,560		25	19	15	

TC PSTATS				PROJECT STATISTICS				PAGE	2
				PROJECT	TOWER				
								DATE	7/15/2004
TWP	RGE	SC	TRACT	TYPE	ACRES	PLOTS	TREES	CuFt	BdFt
06N	02E	19	TOWER	U1	68.00	63	304	S	W

TC PSPCTLTCM		Species Summary - Trees, Logs, Tons, CCF, MBF									
<div>T06N R02E S19 TyU168.0</div>		Project TOWER Acres68.00				Page No1 Date:7/15/2004 Time3:33:54PM					
Species	S	Total	Total	Total	Net Cubic Ft/		CF/	Total CCF		Total MBF	
	T	Trees	Logs	Tons	Tree	Log	LF	Gross	Net	Gross	Net
DOUG FIR		6,866	21,310	21,086	107.71	34.70	1.33	7,399	7,395	3,812	3,708
WHEMLOCK		220	660	272	38.61	12.87	0.56	85	85	38	38
BL MAPLE		144	287	126	33.00	16.50	0.61	48	47	16	11
Totals		7,230	22,257	21,483	104.12	33.82	1.30	7,531	7,527	3,866	3,758

Wood Type Species	Total	Total	Total	Net Cubic Ft/		CF/	Total CCF		Total MBF	
	Trees	Logs	Tons	Tree	Log	LF	Gross	Net	Gross	Net
C	7,086	21,970	21,358	105.56	34.05	1.31	7,483	7,480	3,851	3,747
H	144	287	126	33.00	16.50	0.61	48	47	16	11
Totals	7,230	22,257	21,483	104.12	33.82	1.30	7,531	7,527	3,866	3,758